

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **03188367 A**(43) Date of publication of application: **16.08.91**

(51) Int. Cl.

G01N 27/30**A61B 5/0408**(21) Application number: **02001051**(22) Date of filing: **09.01.90**(30) Priority: **28.09.89 JP 01250772**(71) Applicant: **AGENCY OF IND
SCIENCE & TECHNOL
MITSUBISHI PENCIL CO LTD**(72) Inventor: **KANEKO HIROKO
YAMADA MASAHIRO
SHIGEMATSU SEIJI
NEGISHI AKIRA
KAWAKUBO TAKAMASA
SUDA YOSHIHISA****(54) CARBON MICROELECTRODE AND
MANUFACTURE THEREOF****(57) Abstract**

PURPOSE: To improve the reproducibility of measurement by extruding and molding a composite material wherein crystalline fine carbon powder and organic caking material are dispersed and combined in a thin wire shape, thereafter baking the material in an inactive atmosphere at high temperature, carbonizing the incorporated organic caking material, and using the obtained pure composite carbon thin wire as a working electrode.

CONSTITUTION: A composite material wherein crystalline fine carbon powder and organic caking

material are dispersed and combined undergoes extrusion molding for obtaining an intended thin-wire shape. Then, the material is baked in an inactive atmosphere or in a non-oxidizing atmosphere to high temperature. The incorporated organic caking material is carbonized, and a pure composite carbon thin wire is manufactured and obtained. This wire is used as it is, or the wire which is impregnated with oil is used as a working electrode. The organic caking material is a mixed material of one kind or two or more kinds of organic macromolecular material and its monomers/oligomers, tars/pitches, dry-distilled pitches, thermoplastic resin, the initial polymers of thermosetting resin, and the like.

COPYRIGHT: (C)1991 JPO&Japio

BEST AVAILABLE COPY